ABSTRACT

For assigning bandwidth in a constrained topology ethernet network there is presented a function that creates and manages a ledger of bandwidth requests over the

5   ethernet network. The function, a bandwidth manager, tracks the total bandwidth of each link in the network and the bandwidth that has been reserved on each link. When traffic is granted reserved bandwidth the bandwidth manager notes this allocation in the ledger. The header of the traffic packets indicates that the traffic is of highest priority when the traffic has been given reserved bandwidth. In this

10   manner the bandwidth manager can track and limit the amount of high priority traffic on the network.